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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,497	10/28/2005	Brock Wayne Watson	25791.114.08	4401

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HAYNES AND BOONE, LLP
901 MAIN STREET
SUITE 3100
DALLAS, TX 75202-3789

EXAMINER

BOMAR, THOMAS S

ART UNIT	PAPER NUMBER
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3672

MAIL DATE	DELIVERY MODE
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08/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/528,497

Applicant(s)

WATSON ET AL.

Examiner

Shane Bomar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-8 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 9-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/4/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because of the copy machine marks and shaded areas in the tool making it difficult to discern one part from another. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 18-21, 27-29, 34-37, and 42-45 are objected to because of the following informalities:

- a. in each of claims 19, 21, 27, 29, 35, 37, 43, and 45, the recitation of “the drill pipe” lacks proper antecedent basis;

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- b. in line 4 of each of claims 18, 20, 28, 34, 36, 42, and 44, the recitation of “at position above” should be --at a position above--.
 - c. in claim 28, the recitation of “sealingly off” in line 7 should be --sealing off--.
- Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 26-30, 32, 42-46, and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2006/0096762 to Brisco.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Regarding claims 26, 28, 42, and 44, Brisco discloses a method and system for forming a mono diameter wellbore casing, comprising connecting an expansion cone 120 to a tubular support 116; supporting an expandable tubular member 14 with the tubular support at a position

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above the expansion cone (Fig. 2b); inserting the expandable tubular member into the wellbore; expanding a first portion of the expandable tubular member with the expansion cone (Fig. 3b); sealing off the first expanded portion of the expandable tubular member (Fig. 4b); and pumping fluid into the expandable tubular member between the expansion cone and the sealed off first expanded portion of the expandable tubular member to force the expansion cone through the expandable tubular member to expand a second portion of the expandable tubular member (paragraphs 0036-0038).

Regarding claims 27, 29, 43, and 45, expanding the first portion of the expandable tubular member with the expansion cone further comprises gripping the expandable tubular member with an anchor device 112 supported by the tubular support 116 (Fig. 2d); coupling an actuator 110 between the anchor 112 and the expansion cone 120; and moving the expansion cone with the actuator partially into the expandable tubular member to form the first expanded portion of the expandable tubular member (Figs. 3b and 3c).

Regarding claims 30, 32, 46, and 48, the expansion device is an expandable (thereby compliant) adjustable expansion cone (paragraph 0044).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 3, 4, 9, 10, 18-21, 26-29, 34-37, and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO01/18354 to Oosterling.

Regarding claims 1, 9, and 10, Oosterling teaches a bottom plug for use in connection with an apparatus for forming a mono diameter wellbore casing, the apparatus of the type using an expandable tubular member 30 carried into the wellbore on a tubular support 52 and expanded with an expansion device, or cone 42, connected to the tubular support, the bottom plug comprising: an expandable packer 40b attached below the expansion cone 42; a packer setting mechanism 40 coupled between the expansion cone and the expandable packer for expanding the expandable packer and sealingly setting the expandable packer in an expanded portion of the expandable tubular member; and a release mechanism (not shown, but clearly evident upon comparing Fig. 2b to Fig. 2c) coupled between the expansion cone and the expandable packer for releasing the expandable bottom packer from the expansion cone so that the expansion cone is forced into and through the expandable tubular member to expand the expandable tubular member (Figs. 2a-2c; page 18, line 23 through page 20, line 14).

However, it is not specifically taught that fluid is pumped into the expandable tubular member between the expansion cone and the sealed and set expandable bottom packer to force the expansion cone through the tubular. Nevertheless, it is taught that the cone can be forced through the tubular in any conventional manner (page 20, lines 11-14) and fluid pressure is one such conventional manner (page 19, lines 13-15). Therefore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art that fluid pumped into the area between the expansion cone and the sealed and set expandable bottom packer will achieve the predictable result of forcing the expansion cone through the expandable tubular.

Regarding claim 3, as is notoriously known in the art, most any item in the wellbore is *drillable* (emphasis added).

Regarding claim 4, the packer is retrievable (Fig. 2d).

Regarding claims 18, 20, 26, 28, 34, 36, 42, and 44, Oosterling teaches a method for forming a mono diameter wellbore casing, comprising connecting an expansion device, or cone 42, to a tubular support 52; coupling an expandable bottom packer 40b to and below the expansion cone; supporting an expandable tubular member 30 with the tubular support at a position above the expansion cone (see Fig. 2a wherein the tubular is supported on, and therefore above, the cone 42); inserting the expandable tubular member into the wellbore; sealingly setting the expanded expandable bottom packer in a first expanded portion of the expandable tubular member (Fig. 2b); expanding a first portion of the expandable tubular member with the cone (Fig. 2c); and releasing the expandable bottom packer from the expansion cone (Fig. 2c); pumping fluid into the expandable tubular member between the expansion cone and the set and expanded expandable bottom packer to force the expansion cone through the expandable tubular

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member to expand a second portion of the expandable tubular member (the step of pumping is taught by Oosterling for the same reasons applied to claim 1 above).

Regarding claims 19, 21, 27, 29, 35, 37, 43, and 45, expanding the first portion of the expandable tubular member with the expansion cone further comprises gripping the expandable tubular member with an anchor device 48 ultimately supported by the tubular support; coupling an actuator for the packer 40b between the anchor 48 and the expansion cone 42; and moving the expansion cone with the actuator partially into the expandable tubular member to form the first expanded portion of the expandable tubular member (Figs. 2b and 2c).

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oosterling in view of US 5,297,629 to Barrington et al.

Oosterling teaches the bottom plug of claim that comprises an expandable packer, although it is not specifically taught that the packer has a closable valve.

Barrington et al teach an expandable packer 10a similar to that of Oosterling. It is further taught that the packer has a bypass valve 90 for selectively passing fluidic materials through the packer (Fig. 4; col. 4, lines 59-62). All the claimed elements were therefore known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

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9. Claims 11-17, 21-25, 30-33, 38-41, and 46-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oosterling in view of US 5,667,011 to Gill et al or in view of US 6,607,220 to Sivley.

Oosterling teaches the expansion device of any one of claims 9, 20, 28, 36, or 44 from above, although it is not explicitly taught that the device comprises an adjustable diameter expansion cone, a rotary expansion device, an adjustable diameter rotary expansion device, a compliant expansion device, an adjustable diameter compliant expansion device, a hydroforming expansion device, and/or an adjustable expansion diameter hydroforming device.

Gill et al teach an expansion device that is a cone or alternatively at least one of the aforementioned claimed devices, with the exception of a hydroforming device (Fig. 1; col. 3, line 64 through col. 4, line 20). Sivley teaches an expansion device that is a cone or a hydroforming expansion device (Fig. 1 and col. 5, lines 30-33). All the claimed elements were therefore known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Claims 31, 33, 47, and 49 are analogously obvious over Brisco in view of Gill et al or Sivley.

Allowable Subject Matter

10. Claims 5-8 are allowed.

Conclusion

11. The prior art made of record on form 892 and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 571-272-7026. The examiner can normally be reached on Monday - Thursday from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (In USA or Canada) or 571-272-1000.

/Shane Bomar/
Patent Examiner
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August 4, 2007